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### **Results Key:**

**JNL** = Journal or Magazine **CNF** = Conference **STD** = Standard

### 1 Evaluation of binarization methods for document images

Trier, O.D.; Taxt, T.;

Pattern Analysis and Machine Intelligence, IEEE Transactions on , Volume: 17 , Issue:

3 , March 1995

Pages:312 - 315

#### **IEEE JNL**

# 2 Efficient computation of adaptive threshold surfaces for image binarization

Blayvas, I.; Bruckstein, A.; Kimmel, R.;

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Yanowitz, S.D.; Bruckstein, A.M.;

Pattern Recognition, 1988., 9th International Conference on , 14-17 Nov. 1988

Pages: 270 - 275 vol.1

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# **Evaluation of binarization methods for document images**

Trier, O.D. Taxt, T.

Dept. of Comput. Sci., Michigan State Univ., East Lansing, MI, USA;

This paper appears in: Pattern Analysis and Machine Intelligence, IEEE

Transactions on

Publication Date: March 1995

On page(s): 312 - 315 Volume: 17 , Issue: 3 ISSN: 0162-8828 Reference Cited: 23 CODEN: ITPIDJ

Inspec Accession Number: 4913779

### **Abstract:**

This paper presents an evaluation of eleven locally adaptive binarization methods for gray scale images with low contrast, variable background intensity and noise. Niblack's method (1986) with the addition of the postprocessing step of **Yanowitz** and **Bruckstein**'s method (1989) added performed the best and was also one of the fastest binarization methods

#### **Index Terms:**

document image processing image processing document images gray scale images locally adaptive binarization methods low contrast noise postprocessing variable background intensity

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